

Abstract

A sanitary tank is provided with a clean-in-place agitator assembly in which the impeller portion is removably installed at the tip or the shaft or along the shaft. A shaft housing that penetrates the wall of the tank employs lip seals around the drive shaft so that cleaning fluid supplied at an inlet pipe will spray out through the interior or distal lip seal for spraying the proximal side of the impeller. The impeller is mounted on a non-round drive portion at the tip of the drive shaft, avoiding need for welding or threaded fasteners. A vertical stirrer or impeller has a square drive shaft with transverse grooves, and blades that are removably fitted into respective pairs of these grooves.